

Grinding and Polishing Workers (Hand)

Table of Contents *(scroll or use links below to navigate document)*

What They Do

Tasks

Skills, Knowledge, and Abilities

Work Environment

California's Job Outlook and Wages

Trends

Training

Where Do I Find the Job?

Where Can the Job Lead?

Other Sources



View Career Video

What They Do

Many manufactured products require the finishing touches that only human hands can provide. Grinding and Polishing Workers use hand tools or hand-held power tools to grind, sand, or polish a variety of metal, wood, stone, clay, plastic, or glass objects. They may also maintain or repair equipment, sharpen abrasive grinding tools, and apply solutions or chemicals.

These workers might be called Grinders, Sanders, or Polishers, depending on their specialities. Theirs is the finishing touch on such diverse products as gun barrels, jewelry, rocking chairs, auto parts, and dentures.

Tasks

- ▶ Grind, sand, clean, or polish objects or parts, using hand tools or equipment.
- ▶ Select, load, and adjust workpiece or abrasive parts onto equipment or worktable, using hand tools.
- ▶ Measure and mark equipment, objects, or parts, to ensure grinding and polishing standards are met.
- ▶ Remove workpiece from equipment or work table, using hand tools.
- ▶ Record product and processing data on specified forms.
- ▶ Transfer equipment, objects, or parts, to specified work areas, using moving devices.
- ▶ Sharpen abrasive grinding tools, using machines and hand tools.
- ▶ Repair and maintain equipment, objects, or parts, using hand tools.
- ▶ Apply solutions and chemicals to equipment, objects, or parts, using hand tools.
- ▶ Observe and inspect equipment, objects, or parts, to ensure specifications are met.

*Detailed descriptions of this occupation may be found in the Occupational Information Network (O*NET) at online.onetcenter.org.*

Important Skills, Knowledge, and Abilities

- ▶ Mechanical — Knowledge of machines and tools, including their designs, uses, repair, and maintenance.
- ▶ Engineering and Technology — Knowledge of the practical application of engineering

Grinding and Polishing Workers (Hand)

science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

- ▶ **Equipment Selection** — Determining the kind of tools and equipment needed to do a job.
- ▶ **Operation Monitoring** — Watching gauges, dials, or other indicators to make sure a machine is working properly.
- ▶ **Repairing** — Repairing machines or systems using the needed tools.
- ▶ **Manual Dexterity** — The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.
- ▶ **Wrist-Finger Speed** — The ability to make fast, simple, repeated movements of the fingers, hands, and wrists.
- ▶ **Control Precision** — The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.

Work Environment

Working conditions can be noisy, and Grinding and Polishing Workers must wear safety gear to protect their eyes, hands, ears, and skin from cuts or flying particles. They must have sufficient upper-body strength to hold tools for extended periods while they secure parts. Work schedules are typically 40-hours per week, with many firms offering swing and graveyard shifts. Some workers belong to the International Association of Machinists and Aerospace Workers.

California's Job Outlook and Wages

The California Outlook and Wage table below represents the occupation across all industries.

Standard Occupational Classification	Estimated Number of Workers 2004	Estimated Number of Workers 2014	Average Annual Openings	2006 Wage Range (per hour)
Grinding and Polishing Workers (Hand)				
51-9022	7,000	6,800	180	\$8.47 to \$13.06

Wages do not include self-employment.

Average annual openings include new jobs plus net replacements.

Source: www.labormarketinfo.edd.ca.gov, Employment Projections by Occupation and OES Employment & Wages by Occupation, Labor Market Information Division, Employment Development Department.

Trends

Many products formerly made by hand are now made entirely by machine—right down to the packaging. This is due to the increasing use of computer-controlled machine tools. Employment of these workers is expected to decline slightly between 2004 and 2014; however, there will be a significant number of replacement workers needed in California (1,800) between 2004 and 2014 as workers retire or leave the job for other kinds of work.

Training/Requirements/Apprenticeships

Grinding and Polishing Workers need anywhere from a few days to a few months of on-the-job training to learn the job. Usually, an experienced worker can teach trainees how to do the job. The best workers are those who demonstrate patience and an attention to detail.

Grinding and Polishing Workers (Hand)

Recommended High School Course Work

High school students interested in this kind of work should take wood or metal shop courses. Those who eventually would like to work as Machine Tool Setters, Operators, or Tenders should also take mathematics coursework and blueprint reading.

Where Do I Find the Job?

Applicants should apply directly to employers who employ Grinding and Polishing Workers. Unions representing these workers also have information concerning apprenticeships and related matters.

Use the *Search for Employers by Industry* feature on the *Career Center* page at www.labormarketinfo.edd.ca.gov to locate employers in your area. Search under the following industry names to get a list of private firms and their addresses:

- ▶ All Other Miscellaneous Manufacturing
- ▶ All Other Motor Vehicle Parts
- ▶ Bolts, Nuts, Screws, Rivets, and Washers
- ▶ Electroplating/Anodizing/Coloring Metal
- ▶ Jewelry (except Costume)
- ▶ Machine Shops
- ▶ Metal Coating and Nonprecious Engraving
- ▶ Nonupholstered Wood Household Furniture
- ▶ Precision Turned Product
- ▶ Sign
- ▶ Sporting and Athletic Goods
- ▶ Wood Kitchen Cabinets and Countertops

Search these **yellow page** headings for listings of private firms:

- ▶ Automobile Body Repairing
- ▶ Automobile Parts, Supplies Manufacturing
- ▶ Furniture Manufacturers
- ▶ Machine Shops
- ▶ Metal Fabricating
- ▶ Woodworking

Where Can the Job Lead?

Grinding and Polishing Workers with several years experience in one industry or working on one product can promote to a number of positions, such as Machine Tool Setters, Operators, or Tenders. Others enter apprenticeship programs to become Carpenters, Jewelers, or Tool and Die Makers.

Other Sources of Information

International Association of Machinists and Aerospace Workers
www.iamaw.org

National Institute for Metalworking Skills
www.nims-skills.org

Precision Metalforming Association Educational Foundation
www.pmaef.org

United Brotherhood of Carpenters and Joiners of America
www.carpenters.org

